

CLAIMS:

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent is:

1. A system for communicating data to a wearable appliance including a wireless data receiver device for receiving wireless data communications, said system comprising:
a first communications sub-system enabling a user to initiate a request for data to be communicated to said wearable appliance;
a second communications sub-system including a wireless data transmission channel for communicating data to said wearable appliance; and,
a server control device for receiving said data requests via said first communications sub-system and, in response to said request, retrieving said requested data for said user and assembling said retrieved data in a form suitable for communication via said second communications sub-system, whereby a user demands said data transfer from said first communications sub-system and receives a data transmission via said second communications sub-system without requiring further user participation during said transmission.

2. The system as claimed in Claim 1, wherein said request includes a user identification code for uniquely identifying the user's wearable appliance and ensuring proper data transmission thereto.

3. The system as claimed in Claim 2, wherein said server device includes mechanism for generating a personalized menu comprising user selections of types of data to be transmitted based on said user identification code.

1 4. The system as claimed in Claim 3, wherein said first
2 communications sub-system comprises a telephone system including
3 a telephone keypad, said user identification code comprising a
4 sequence of one or more dual-tone multi-frequency DTMF signals
5 entered by said user via said telephone keypad.

1 5. The system as claimed in Claim 4, wherein said server control
2 device includes mechanism responsive to said user identification
3 code for retrieving said personalized menu of types of data to be
4 transmitted and generates a voice transmission for presenting
said personalized menu selections to said user via said telephone
system.

1 6. The system as claimed in Claim 5, wherein said user selects a
2 type of data to be transmitted via said telephone keypad,
3 said server control device includes mechanism for receiving DTMF
4 signals and interpreting said DTMF signals for association with
said user menu selection.

1 7. The system as claimed in Claim 3, wherein said first
2 communications sub-system comprises a personal computing device
3 implementing a Web browser for accessing and communicating with
4 said server control device via Web-based communications, wherein
5 said user identification code comprises entry of a password entry
6 via a keyboard device entered in a Web page.

1 8. The system as claimed in Claim 7, wherein said server control
2 device includes mechanism responsive to said user identification
3 code for retrieving said personalized menu of types of data to be
4 transmitted and generates a Web-based communication for receipt
5 by said user Web browser to present said personalized menu.

1 9. The system as claimed in Claim 8, wherein said user selects a
2 type of data to be transmitted via a mouse device by clicking a
3 menu choice presented on a Web page.

1 10. The system as claimed in Claim 1, wherein said second
2 communications sub-system comprises a paging network.

1 11. The system as claimed in Claim 1, wherein said second
2 communications sub-system comprises a Bluetooth wireless
3 communications network.

1 12. The system as claimed in Claim 1, wherein said second
2 communications sub-system communicates said requested data to
3 said wearable appliance at a requested future time, said wearable
4 appliance including alarm mechanism for placing said wireless
5 data receiver device in a receive mode for receiving said
6 wireless data communications at said requested time.

1 13. A method for communicating data to a wearable appliance
2 implementing a wireless data receiver device for receiving
3 wireless data communications, said method comprising the steps
4 of:

5 a) receiving a data request via a first communications
6 sub-system;

7 b) retrieving said requested data for said user in
8 response to said request;

9 c) assembling said retrieved data in a form suitable
10 for communication via a second communications sub-system; and,

11 d) communicating said requested data to said wearable
12 appliance over a wireless data transmission channel via a second
13 communications sub-system, wherein said user requests said data
14 transfer from said first communications sub-system and receives a
15 data transmission via said second communications sub-system

16 without requiring further user participation during said
17 transmission.

1 14. The method as claimed in Claim 13, wherein said data request
2 includes a user identification code for uniquely identifying the
3 user's wearable appliance.

1 15. The method as claimed in Claim 14, wherein prior to said
2 retrieving step b), the step of presenting a personalized menu to
3 said user, said menu comprising user selections associated with
4 types of data to be transmitted based on said user identification
code.

1 16. The method as claimed in Claim 15, wherein said first
2 communications sub-system comprises a telephone system including
3 a telephone keypad, said user identification code comprising a
4 sequence of one or more dual-tone multi-frequency DTMF signals
5 entered by said user via said telephone keypad.

1 17. The method as claimed in Claim 16, wherein said presenting
2 step further includes the steps of:

3 retrieving said personalized menu of types of data to be
4 transmitted from a storage device; and,

5 generating a voice transmission for presenting said
6 personalized menu selections to said user via said telephone
7 system in response to said user identification code.

1 18. The method as claimed in Claim 17, wherein said retrieving
2 step b) further includes the steps of receiving DTMF signals
3 associated with said user menu selection and interpreting said
4 received DTMF signals for retrieving said requested data.

1 19. The method as claimed in Claim 15, wherein said first
2 communications sub-system comprises a personal computing device
3 implementing a Web browser for accessing and communicating with
4 said server control device via Web-based communications, said
5 user identification code comprising a password entry via a
6 keyboard device entered in a Web page.

1 20. The method as claimed in Claim 19, wherein said presenting
2 step further includes the steps of:

3 retrieving said personalized menu of types of data to
4 be transmitted; and,

5 generating a Web-based communication for receipt by
6 said user Web browser to present said personalized menu.

7 21. The method as claimed in Claim 20, wherein said retrieving
8 step b) is responsive to a user mouse click on a Web page menu
selection of a type of data to be transmitted.

1 22. The method as claimed in Claim 13, wherein a data request
2 includes request for receipt of said data at a requested future
3 time, said method further comprising the step of: placing said
4 wireless data receiver device in a receive mode for receiving
5 said wireless data communications at said requested time.

1 23. A program storage device readable by a machine, tangibly
2 embodying a program of instructions executable by the machine to
3 perform method steps for communicating data to a wearable
4 appliance implementing a wireless data receiver device for
5 receiving wireless data communications, said method steps
6 including the steps of:

7 a) receiving a data request via a first communications
8 sub-system;

9 b) retrieving said requested data for said user in
10 response to said request;

11 c) assembling said retrieved data in a form suitable
12 for communication via a second communications sub-system; and,

13 d) communicating said requested data to said wearable
14 appliance over a wireless data transmission channel via a second
15 communications sub-system, wherein said user requests said data
16 transfer from said first communications sub-system and receives a
17 data transmission via said second communications sub-system
18 without requiring further user participation during said
19 transmission.

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24. The program storage device readable by a machine as claimed
in Claim 23, wherein said data request includes a user
identification code for uniquely identifying the user's wearable
appliance.

25. The program storage device readable by a machine as claimed
in Claim 23, wherein prior to said retrieving step b), the step
of presenting a personalized menu to said user, said menu
comprising user selections associated with types of data to be
transmitted based on said user identification code.

1 26. The program storage device readable by a machine as claimed
2 in Claim 24, wherein said first communications sub-system
3 comprises a telephone system including a telephone keypad, said
4 user identification code comprising a sequence of one or more
5 dual-tone multi-frequency DTMF signals entered by said user via
6 said telephone keypad.

1 27. The program storage device readable by a machine as claimed
2 in Claim 26, wherein said presenting step further includes the
3 steps of:

4 retrieving said personalized menu of types of data to be
5 transmitted from a storage device; and,
6 generating a voice transmission for presenting said
7 personalized menu selections to said user via said telephone
8 system in response to said user identification code.

1 28. The program storage device readable by a machine as claimed
2 in Claim 25, wherein said retrieving step b) further includes the
3 steps of receiving DTMF signals associated with said user menu
4 selection and interpreting said received DTMF signals for
5 retrieving said requested data.

6 29. The program storage device readable by a machine as claimed
7 in Claim 24, wherein said first communications sub-system
8 comprises a personal computing device implementing a Web browser
9 for accessing and communicating with said server control device
10 via Web-based communications, said user identification code
11 comprising a password entry via a keyboard device entered in a
12 Web page.

13 30. The program storage device readable by a machine as claimed
14 in Claim 29, wherein said presenting step further includes the
15 steps of:

16 retrieving said personalized menu of types of data to
17 be transmitted; and,

18 generating a Web-based communication for receipt by
19 said user Web browser to present said personalized menu.

20 31. The program storage device readable by a machine as claimed
21 in Claim 30, wherein said retrieving step b) is responsive to a
22 user mouse click on a Web page menu selection of a type of data
23 to be transmitted.

32. The program storage device readable by a machine as claimed in Claim 23, wherein a data request includes request for receipt of said data at a requested future time, said method further comprising the step of: placing said wireless data receiver device in a receive mode for receiving said wireless data communications at said requested time.